

ABSTRACT OF THE DISCLOSURE

[0027] A vacuum vane pump for generating a vacuum condition for aircraft instruments includes a rotor having a peripheral surface eccentrically mounted in a housing having a confrontingly opposed inner surface so that the opposed surfaces define a crescent-shaped chamber. The rotor has a plurality of radial slots, each of which receives a vane which is slidably displaced radially outwardly along the slot as the rotor is rotatively driven so that the outer tips of the vanes are pressed in frictional abutment with the inner surface of the housing. Each slot has a radially inward facing shoulder and each vane has a corresponding radially outward facing shoulder for mutual contact engagement when the tip becomes worn to a predetermined degree. The vanes are thereby captured within their respective slots so that, as the tips wear down, a gap forms between each tip and the inner surface of the housing at the widest part of the chamber, resulting in a gradual loss of vacuum that indicates that the pump requires maintenance.